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Charts

Briefing of Civilian Consultants to the NSC

Continental Defense Committee - 5 August 53

PART II - General Cabell

Gentlemen:

Mr. Dulles has presented the latest CIA estimate on the overall capabilities of the Soviet Union to wage war.

I shall discuss, first, Soviet capabilities for attacking the Continental US and I shall then describe the extent to which US intelligence is able to provide advance warning of a major Soviet military operation.

I understand that you have had an opportunity to read Special Estimate Number 36/1 which has just been published and which represents the coordinated views of the US intelligence community. As you may recall this estimate deals solely with Soviet gross capabilities for an attack on the continental US during the period mid-1953 to mid-1955. By "gross capabilities" we mean that the effect of US counter action

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Prepared by

4 Aug 53

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against the invading force is not considered. You will recall, too, that SE-36/1 does not go into such questions as to whether the major Soviet atomic bombing effort would actually be directed against the US, or would, as the British believe, be directed at European targets, especially targets in the United Kingdom.

If you keep these guidelines in mind, I believe my remarks, which are largely a summary of SE-36/1, will be more meaningful.

As Mr. Dulles has indicated, the Soviet atomic energy program has been receiving, and will almost certainly continue to receive, the highest priority. But, as you well know, the existence of a Soviet stockpile of atomic weapons is, in itself, only one factor in the assessment of Soviet capabilities to attack the US. The other, and ~~equally~~ ^{IP} ~~equally~~ as important factor, is the Soviet ability to deliver such weapons on US targets. What is the present strength of the Soviet

Long Range air arm? This element of the Soviet Air Force consists

essentially of three Air Armies, one in the Far East and two in ~~the~~ ^{the Western}

~~area of the Soviet Union.~~

~~These~~ Air Armies constitute the strategic striking force

~~Soviet Union~~
of the ~~USSR~~. The TU-4, which was copied from the American B-29, is

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the only Soviet bomber known to be in operational use which is capable of carrying atomic weapons to distant targets. We estimate that the USSR has approximately one thousand TU-4's now available for operational use.

The future strength and composition of the Soviet long range bomber force is difficult to estimate. There is evidence of the development of jet medium bombers; and there have been recent sightings of aircraft reportedly larger than the TU-4 type. These sightings, if confirmed as heavy bomber aircraft, would establish that at least experimental production has begun on heavy bombers.

~~Our estimates of the actual strength and composition of the Soviet long range bomber force through 1955 are based on the assumption that the USSR will initiate series production of a jet medium bomber during this period, and that it began series production of a heavy bomber in mid-1953.~~

By mid-1954 we estimate that the USSR will have 1,250 long range bombers of which ~~3,250~~ ^{may} 30 ~~may~~ be heavy bombers, and the balance, TU-4's.

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Essentially the same number of
By mid-1955 we estimate they will have ~~1,300~~ long range bombers, of

which 50 ^{may} ~~will~~ be jet medium bombers, ~~1,050~~ ^{will be} TU-4's, and 200

^{may} ~~will~~ be heavy bombers, and the balance *↓*.

The TU-4, under normal operating conditions, is estimated to

have a combat radius of 1,700 nautical miles and a combat range of

3,100 nautical miles with a 10,000 pound bomb load. *a stripped down* ~~Under cruise~~

version could possibly have a radius of 2150
~~control conditions necessary to reach distant target areas, its~~
N.M. with a range of 4000 N.M.

~~speed would be approximately 175 knots at an altitude of about 10,000~~

feet. Although there is no intelligence to indicate that it has done

so, the USSR is considered capable of modifying the TU-4 to increase

its range. This modification would markedly reduce the plane's

defensive capabilities against interceptor attack, *would* but increase its

combat range to 4,000 miles carrying a 10,000 pound bomb load. It is

possible that by mid-1955 the USSR may be able to achieve minor

improvements in the performance characteristics of the TU-4. *however* There

is no evidence, ~~however~~, of Soviet development of the more powerful

piston engines which would be essential to major improvement. It is

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~~more likely that the USSR would devote its efforts to developing an aerial refueling capability for TU-4's and to the creation of a heavy bomber force.~~

Although no intelligence is available concerning Soviet inflight refueling capabilities, refueling techniques do not impose serious technical problems, and the ~~Soviet Union~~ ^{Soviet Union} has had access to US techniques and equipment. With one refueling of a stripped-down TU-4, its combat radius could be increased to approximately 3,000 nautical miles, and its range to 5,600 nautical miles.

As I indicated a moment ago, we believe that a jet medium bomber may be in operation some time in 1955. Such a bomber would have improved altitude and speed characteristics, but less range than a TU-4. ~~Such an~~ ^{This} aircraft ~~could~~ ^{might} have a combat radius of 1,500 and a combat range of 2,900 nautical miles carrying a 10,000 pound bomb load.

The prototype heavy bomber, assuming it is put in ~~series~~ production and equipped with a turbo-prop power plant, ~~could~~ ^{might} have a combat radius of 3,420 nautical miles and a combat range of 6,600 nautical

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miles with a bomb load of 10,000 pounds. By mi

~~if the bomber is loaded with a heavy bomb load, it might permit~~

~~combat radius of 3,700 nautical miles and a combat range of 7,000~~

~~nautical miles with a 10,000 pound bomb load.~~

① We have examined the Soviet strategic air force. Let us now turn to the bases from which Soviet bombers would attack. Three base areas, the Chukotski Peninsula in Northeast Siberia, the Kola Peninsula in Northwest USSR, the northwestern Soviet Union, and Soviet and Soviet-controlled territory along the Baltic and in Eastern Germany, are the closest to the United States.

[NOTE: COVER FROM CHARTS]

From the Chukotski Peninsula, which is nearest to the US, the *stripped down* standard TU-4, without inflight refueling, on a two-way mission could *Seattle area.* not reach the ~~United States~~. However, on a one-way mission it could reach targets ~~within an arc drawn from San Diego to Lake Superior.~~

~~The stripped down TU-4 on a two-way mission could reach Seattle without inflight refueling, but on a one-way mission it could reach targets in all parts of the United States except Florida. From this base,~~

From the Chukotski Peninsula, which
is nearest to the US, the stripped down
TU-4 on a two-way mission it
could reach Seattle; on a one-way
mission, it could reach all parts of
the US except Florida. From the
Kola Peninsula and the Baltic-East
German areas a stripped-down TU-4
could reach the US only on one-way
missions.

From the

Murmansk area, such a bombing mission could reach targets roughly
north and east of a line from Charleston, South Carolina, to southern
Oregon. From the Baltic area, stripped down TU-4's on one-way

missions could attack targets north and east of a line drawn generally
from Charleston, South Carolina, through Montana. ^{could be attacked.} ~~You will note that~~

IP With one air-refueling, the
* TU-4 could return to Chukotski bases
after operating against targets anywhere
in the U.S. One air-refueling would ^{not} ~~allow~~
permit TU-4's operating from Koltz and
Baltic-East German bases to strike any US
target on a two-way mission.
~~and return home~~

From ~~the~~ Chukotski bases, Soviet
heavy bombers, when produced, could operate

~~the~~ against targets

located north and west of an arc drawn generally from central Texas

through central New York.

- From the Koltz

Peninsula and the Baltic sea, such aircraft
should be able to reach the New York-New England
area on two-way missions. With one

(with refueling)

1P

these could be minimized by advance stockpiling and use of the area

for staging bases only. There are ~~now~~ no known ~~first-class~~ airfields

capable of launching TU-4 Satellites from either the Chukotski or Kola
in this area, which could be used for sustained operations, and no

~~have not positively identified any other persons.~~

It is possible, of course, that new airfields might have been built or existing fields adapted to accommodate these aircraft.

Moreover, the USSR has emphasized use of frozen

surfaces in the Arctic, which makes possible the wintertime use of

airfields with a minimum of preparatory effort.

The Baltic-East German area has adequate bases to support large numbers of medium bombers. However, a major disadvantage of this area from the Soviet point of view is that Great Circle routes to the United States pass over portions of Western Europe or Scandinavia, and any attempted air strike might be detected early enough to provide warning.

Over and above a weapons stockpile, allong range air arm, and bomber bases, there are other less obvious factors which must be taken into account when assessing Soviet strategic bombing capabilities.

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One such factor is the efficiency of the bomber crews. ^{while} We have no evidence of Soviet crews receiving extensive training in long distance flying and navigation, ^{it} is probable ~~that~~ that a limited number of crews has been given sufficient training to permit an early attack against the US.

Targeting and bombing accuracy is another important factor that must be considered. The USSR is able to obtain the data necessary for identification of most targets in the US under visual and blind-bombing conditions. It also possesses optical bombsights equivalent to US World War-II type models. The ~~Soviet Union~~ ^{Soviet Union} is equipping its TU-4's with blind-bombing and navigation type radars. We have insufficient evidence to estimate with confidence the degree of accuracy which Soviet crews might actually achieve. ~~However~~

~~tentative~~ ^{they have a tolerable} we estimate that ~~the median of all aiming errors would~~ ^{accuracy} be about 1,000 feet ~~for targets at altitudes~~ ^{of 25,000 to 30,000 feet} ~~of 25,000 to 30,000 feet~~ ^{of 1,000 to 1,500 feet}

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The availability, abort rate, and replacement of Soviet aircraft are other relevant considerations. We estimate that the ~~USSR~~ ^{Soviet Union} could have about 90 percent of its TU-4 strength operationally available for an initial, deliberately-prepared surprise attack against the US. However, the number actually sortied would depend upon many other factors.

~~Since most US target areas can be reached only by one-way, partially-~~
~~in many cases including air refueling,~~
~~refueled missions, the abort rate would be extremely high.~~ We estimate *the abort*
before reaching targets, would
~~this rate to be between 20 and 25 percent without consideration for~~

interception and poor navigation, and with variations in either direction according to such factors as season, weather, and extent of preparation. *Then many aircraft would be expended.* No appreciable reserves of TU-4's are believed available. TU-4 production is currently estimated at about 30 ^{aircraft} ~~planes~~ per month, a figure which could probably be increased slightly in the short run.

~~Another key factor is the ability to make accurate weather forecasts. By 1955 we believe that the USSR will have achieved a short-period weather prediction capability in at least the European USSR of 85 percent reliability as compared with the present reliability of 60 percent.~~

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~~This capability, plus extensive experience in meteorological research in the extreme northern latitudes, good weather reporting facilities in Siberia, availability of historical data on North American weather conditions, and access to current North American weather conditions and forecasts should enable the USSR to predict both route and target weather with reasonable accuracy.~~

Finally, there is the question of Soviet capability to jam US electronic warning equipment. We believe that the ~~USSR~~ ^{Soviet Union} can now ^{point to point} seriously disrupt long range radio communications between the continental US and its overseas facilities and that this capability will be increased over the next several years. The ~~USSR~~ ^{Soviet Union} has probably produced sufficient electronic countermeasure devices to equip some TU-4 aircraft, although it is not known whether TU-4's have in fact been equipped with such equipment. ^{nor is it known what} ^{I would have} ~~The effectiveness of such devices against~~ US defensive radar, ~~is also unknown.~~

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Let me now sum up Soviet capabilities for an air offensive against the US. We believe that the ~~USSR~~ ^{Soviet Union} has the capability to reach all parts of the US and to attempt the delivery of its full stockpile of atomic weapons. However, even a stripped-down TU-4 could reach only the extreme northwestern corner on two-way missions without aerial refueling. Even with ^{air} ~~aerial~~ refueling and other range extension techniques, attack upon the strategic northeastern industrial area and upon most of the principal strategic bases almost certainly would involve the expenditure of the attacking aircraft and most of the crews on one-way missions. Until it has a heavy bomber available for operational use, the ~~USSR~~ ^{Soviet Union} will not have the capability to reach most of the strategically important areas in the US on two-way missions.

The threat to the continental US is not confined to the Soviet ability to deliver conventional and mass destruction ^{weapons} by aircraft alone. I shall now turn briefly to the capabilities which the USSR has to deliver such weapons by means other than aircraft.

First let us consider guided missiles. We believe that the only weapons of this type presently available to the ~~USSR~~ ^{Soviet Union} are the V-1 and V-2 type weapons which were used operationally by the Germans in World War II. ^N ~~neither~~ neither of these missiles is known to be in production. We do not believe that ~~either~~ the ~~USSR~~ V-2 missile will constitute a threat against the continental US during the next few years, however

a limited threat against coastal areas posed by the V-1 type missile launched from submarines. Such a missile might carry an atomic war head.

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The clandestine delivery of weapons of mass destruction is another threat that must be assessed. ^{Soviet Union} We believe that the USSR is capable of producing atomic weapons which could be smuggled into the US either as

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complete assemblies or as component parts. The assembled devices could be small enough to fit into the luggage compartment of an automobile. There are many forms of clandestine delivery. For example, assembled weapons could be dropped by apparently friendly aircraft, could be detonated in the hold of a ship, or could be sown as underwater mines. Although there are limits to the US ability ~~to~~ physically detect such covert activities, the operation would nevertheless involve a considerable risk of being compromised because of its scope and complexity. We believe, therefore, that although clandestine attack with atomic weapons might occur against specially selected targets as a supplement to overt delivery by air, such an attack, on a scale comparable to that which might be delivered overtly by air, would probably be precluded by security considerations.

We assess the Soviet naval threat to the continental US to be of a low order. The only substantial threat of this kind is posed by the Soviet submarine force. In addition to its potential in connection with the delivery of mass destruction weapons, the submarine force could, at least in the initial phases of a conflict, inflict serious damage on US overseas communications and carry out offensive mining in the shipping approaches to principal US harbors. ~~We believe that over the next few years, the submarine force will be enlarged and improved by the introduction of additional numbers of improved ocean patrol types, by the progressive modernization of existing types, and by the possible adaptation of submarines to missile launching.~~

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